



pytest

What is PyTest Used For



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Who Uses PyTest

PyTest is a robust Python testing tool that can be used for all types software testing.

You will use pytest if you are:

- Software developer
- QA Engineer
- Independent software testing engineer
- Individuals practicing
- Working on open-source projects.

What is PyTest?

PyTest is a software test framework. PyTest is a command-line tool that automatically finds tests you've written, runs the tests, and reports the results.

PyTest stands out above many other test frameworks:

- Simple tests are simple to write in pytest.
- Complex tests are still simple to write.
- Tests are easy to read.
- Easy to learn

Teenager Arrested in Computer Crime Scandal".

"Hacker Arrested after Bank Tampering...



Damn kids. They're all ALIKE...

But did you ever wonder what made him tick, what forces shaped him, what may have molded him? "Hacker Arrested after Bank Tampering..."

I am a hacker, enter my World....

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Mine is a world that begins with school

I'm smarter than most of the other kids, this crap they teach us bores me...

Damn underachiever. They're all alike.

I'm in junior high or high school.

I've listened to the same PLAIN for the fifteenth time how to reduce a fraction. I understand it.

Damn kid. "No, Ms. Smith, I didn't show my work. I did it in my head..."

Probably copied it. They're all alike.

I made a discovery today. I found a COMPUTER. Wait a second, this is cool. I do what I want to. If it makes a mistake, it's because I screwed it up.

Not because it doesn't like me... Or feels threatened by me... It's smart, it likes teaching and shouldn't be here...

And then it happened... a door opened to a world... rushing through the phone line like a hacker THROUGH AN ADDICTIVE GAMES, is play games. They're all alike.

an electronic pulse is sent out, a refuge from the day-to-day incompetencies is sought... a board is found.

"This is it... this is where I belong..."

I know everyone... even if I've never met them, never talked to them, may never hear from them again... I know you all...

You bet your ass we're all alike...

phone line again. They're all alike...

when we hungered for steak... the bits of meat that you did let slip through were pre-chewed and tasteless

illing pupils,

we've been spot on.

We were the ones who

This is

already existing

inals.



Martin Yanev

Aerospace & Software Engineer

We exist with no boundaries, nationality, culture, religion, class... we're all equal, yet we're the criminals.

You build weapons, wage wars, you murder, cheat, and lie to us and try to make us believe it's FOR OUR OWN GOOD,

yet we're the criminals.

Yes, I am a criminal, but that's just part of curiosity.

My crime is that of outsmarting you, something that you will never forgive me for.

not what they look like.

I am a hacker, and this is my manifesto.

You can stop this individual, but you can't stop us all.

Unit Test

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- A test that checks a small bit of code, like a function or a class, in isolation of the rest of the system.

"This is it... this is where I belong..."

I know everyone here... even if I've never met them, never talked to them, may never hear from them again... I know you all...

Damn kid. Tying up the phone line again. They're all alike. You bet your ass we're all alike...

we've been spoon-fed baby food at school when we hungered for steak. the bits of meat that you did let slip through were pre-chewed and tasteless

We've been dominated by sadists, or ignored by the apathetic. The few that had something to teach found us willing pupils, but those few are like drops of water in the desert.

This is our world now... the world of the electron and the switch, the beauty of the baud. We make use of a service already existing without paying for what could be dirt-cheap if it wasn't run by profiteering gluttons, and you call us criminals.

We explore...

We seek after knowledge...

and YOU call us criminals.

We exist without skin color, without nationality, without religious bias...

You build atomic bombs, you wage wars, you murder, cheat, and lie to us and try to make us believe it's FOR OUR OWN GOOD, yet we're the criminals.

Integration Test

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psychology and 1950's techNObrain, ever take a look behind the eyes of the hacker?

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- A test that checks a larger bit of the code, maybe several classes, or a subsystem.

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System Test

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- A test that checks all of the system under test in an environment as close to the end-user environment as possible.

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Functional Test

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- A test that checks a single bit of functionality of a system. A test that checks how well we add or delete or update a task item in Tasks is a functional test.

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Subcutaneous Test

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- A test that doesn't run against the final end-user interface, but against an interface just below the surface. Since most of the tests in this book test against the API layer—not the CLI—they qualify as subcutaneous tests.

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PyTest Inputs and Outputs

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A Simple Test using PyTest

Input function:

```
def test_pass():
    assert (3, 4, 5) == (3, 4, 5)
```

Run:

```
$ cd /path/sc1
$ pytest two.py
```

Output:

```
collected 1 items
two.py .
```

A Simple Test using PyTest

Input function:

```
def test_fail():
    assert (3, 4, 5) == (5, 4, 3)
```

Run:

```
$ cd /path/sc1
$ pytest one.py
```

Output:

```
collected 1 items
one.py F
```

A Simple Test using PyTest

Input function:

```
def test_pass():
    assert (3, 4, 5) == (3, 4, 5)
```

Run:

```
$ cd /path/sc1
$ pytest two.py -v
```

Output:

collected 1 items

two.py::test_passing PASSED